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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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Michael Black

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EXAMINER

SHAY, DAVID M

ART UNIT

PAPER NUMBER

3735

MAIL DATE

DELIVERY MODE

08/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/017,287

Applicant(s)

BLACK, MICHAEL

Examiner

david shay

Art Unit

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 29, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 6-12, 19-23, 25-29, 31-34, 41, 43-48, 53, 55, 56, 69, and 71-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-12, 19-23, 25-29, 31-34, 41, 43-48, 53, 55, 56, 69, and 71-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 6-12, 20, 21, 23, 25, 26, 31-34, 43, 45-48, 55, 69, 71-74, 76-80, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black et al ('740) in combination with Sugiyama et al and Hu. Black et al ('740) teach a device and method as claimed, including selection of a treatment plan e.g. irradiating the tissue with a given wavelength on the basis of it's color, but does not discuss the source of the different laser wavelengths applied all at once. Sugiyama et al teach that multiple lasers can be used to produce simultaneous beams of differing frequencies. Hu teach the scanning of a laser in 3 dimensions to treat cutaneous vascular lesions with small focal spots. It would have been obvious to the artisan of ordinary skill to employ the applicator of Black et al ('740) in the apparatus and method of Sugiyama et al, since this will direct all the laser wavelengths to the same spot, and enables the use of smaller spot sizes, as taught by Black et al (740) or to employ the device and method of Sugiyama et al in the device and method of Black et al ('740) since Black et al ('740) give no structure to apply different beams all at once, to employ different pulse widths, since this is not critical; is well within the skill of one having ordinary skill in the art; provides no unexpected result; and will provide the required power variation to deposit the correct amount of energy at different depths, and to employ a semiconductor diode laser, since this is not critical; is a recognized equivalent to other lasers, is well within the skill of one having ordinary skill in the art; provides no unexpected result; and would consume less power than gas, crystal, or liquid lasers, and in either case to employ the method on cutaneous vascular lesions, which requires different three dimensional

Art Unit: 3735

delivery patterns, as taught by Hu, and which would necessarily produce different spot sizes at the surface, thus producing a device and method such as claimed.

Claims 1, 2, 6, 8-12, 25, 26, 28, 31-34, 43, 45-48, 55, 69, 71-74, 76-80, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin – White et al in combination with Black et al ('740) and Hu. Dumoulin – White et al teach a device such as claimed except the use of a mirror device, the spot size, and scanning the beam. Black et al ('740) teach the use of a mirror based focusing device that produces the claimed spot size and selection of a treatment plan e.g. irradiating the tissue with a given wavelength on the basis of it's color. Hu teach the scanning of a laser in 3 dimensions to treat cutaneous vascular lesions with small focal spots. It would have been obvious to the artisan of ordinary skill to employ the device and method of Black et al ('740) in the device and method of Dumoulin – White et al, since this would locate the various wavelength of laser light at the same point, or to provide the device and method of Dumoulin – White et al in the device and method of Black et al ('740), since the device and method of Black et al ('740) requires no particular laser, and in either case to employ the method on cutaneous vascular lesions, which requires different three dimensional delivery patterns, as taught by Hu, and which would necessarily produce different spot sizes at the surface, and to employ different pulse widths, since this is not critical; is well within the skill of one having ordinary skill in the art; provides no unexpected result; and will provide the required power variation to deposit the correct amount of energy at different depths, thus producing a device and method such as claimed.

Claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg in combination with

Art Unit: 3735

Black et al ('740) and Hu. Freiberg teaches device on claimed except the mirror-based device, the spot size, and scanning. Black et al ('740) teach the use of a mirror-based device as claimed which can be scanned and selection of a treatment plan e.g. irradiating the tissue with a given wavelength on the basis of it's color. Hu teach the scanning of a laser in 3 dimensions to treat cutaneous vascular lesions with small focal spots. It would have been obvious to the artisan of ordinary skill to employ the device and method of Black et al ('740) in the device and method of Freiberg, since this would effectively combine the different wavelengths and project them at the same spot, as taught by Black et al ('740) or to employ the sources and beam combiners of Freiberg in the device of Black et al ('740) since Black et al ('740) describes no structure for applying different color beams all at once, to employ different pulse widths, since this is not critical; is well within the skill of one having ordinary skill in the art; provides no unexpected result; and will provide the required power variation to deposit the correct amount of energy at different depths, and to employ a semiconductor diode laser, since this is not critical; is a recognized equivalent to other lasers, is well within the skill of one having ordinary skill in the art; provides no unexpected result; and would consume less power than gas, crystal, or liquid lasers, and in either case to employ the method on cutaneous vascular lesions, which requires different three dimensional delivery patterns, as taught by Hu, and which would necessarily produce different spot sizes at the surface, thus producing a device and method such as claimed.

Claims 1, 28, 29, 31, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg in combination with Black et al ('740) and Hu as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Black et al ('936). Black et al ('936) teach the use of a micromanipulator as an input for an

endoscope. It would have been obvious to the artisan of ordinary skill to employ the micromanipulator of Black et al ('936) in the device of Freiberg, since this is an appropriate control device for an endoscope, as taught by Black et al ('936) or to include the beam combiner of Freiberg in the device of Black et al ('936), since this allows multiple treatments with a single instrument as taught by Freiberg and to construct the device in the claimed dimensions, since this is not critical, thus producing a device and method such as claimed.

Claims 20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg a combination with Black et al ('740) and Hu as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Dew. Dew teaches removing optical components from the optical path by rendering the location that the optical component resides in no longer a part of the optical path. It would have been obvious to the artisan of ordinary skill to employ the optical path combining device of Dew in the device of Freiberg, since Freiberg discloses no particular mechanism to accomplish the superposition of beams prior to reaching any steering device, thus producing a device such as claimed.

Claims 27, 44, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg as combination with Black et al ('740) and Hu as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Kittrell et al. Kittrell et al teach an apparatus for and method of the use of fluorescence maps for diagnosing tissue to locate tissue that is suitable for removal. It would have been obvious to the artisan of ordinary skill to employ the diagnostic system of Kittrell et al in the system of Freiberg since this can locate the tissue requiring treatment and prevent the treatment of healthy tissue as taught by Kittrell et al or to include the multiple laser system of Freiberg in the device of Kittrell

Art Unit: 3735

et al, since this would allow treatment of both hard and soft tissue, as taught by Freiberg, thus producing a device such as claimed.

Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg a combination with Black et al ('740) and Hu as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Garcia. Garcia teaches the use of treatment plan databases. It would have been obvious to the artisan of ordinary skill to employ the database of Garcia in the device of Freiberg, since this would vastly simplify the input of the treatment by the physician, since only the particular plan need be indicated, rather than entering multiple parameters for multiple lasers and conditions, thus producing a device such as claimed.

Claims 82 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg a combination with Black et al ('740) and Hu as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Black et al ('509). Black et al ('509) teaches the use of carbon dioxide and argon lasers. It would have been obvious to the artisan of ordinary skill to employ the lasers of Black et al ('509) in the device of Freiberg, since this would allow immediate coagulation after making an incision, as taught by Black et al ('509), thus producing a device such as claimed.

Applicant's arguments with respect to claims 1, 2, 6-12, 19-23, 25-29, 31-34, 41, 43-48, 53, 55, 56, 69, 71-84 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II, can be reached on Monday, Tuesday, Wednesday, Thursday, and Friday. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3735

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'D. M. Shay', is positioned above the printed name.

DAVID M. SHAY
PRIMARY EXAMINER
GROUP 330